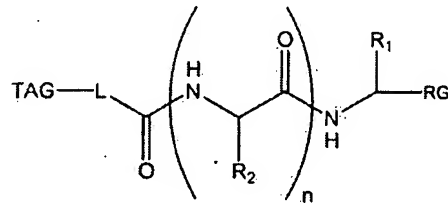


Amendments to the Claims/Listing of Claims

Please amend claim 20 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

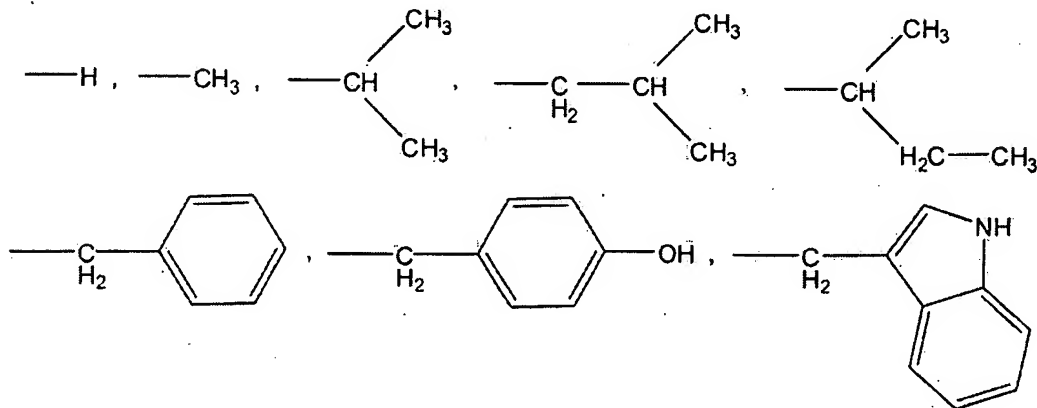
1. – 19. (Canceled)

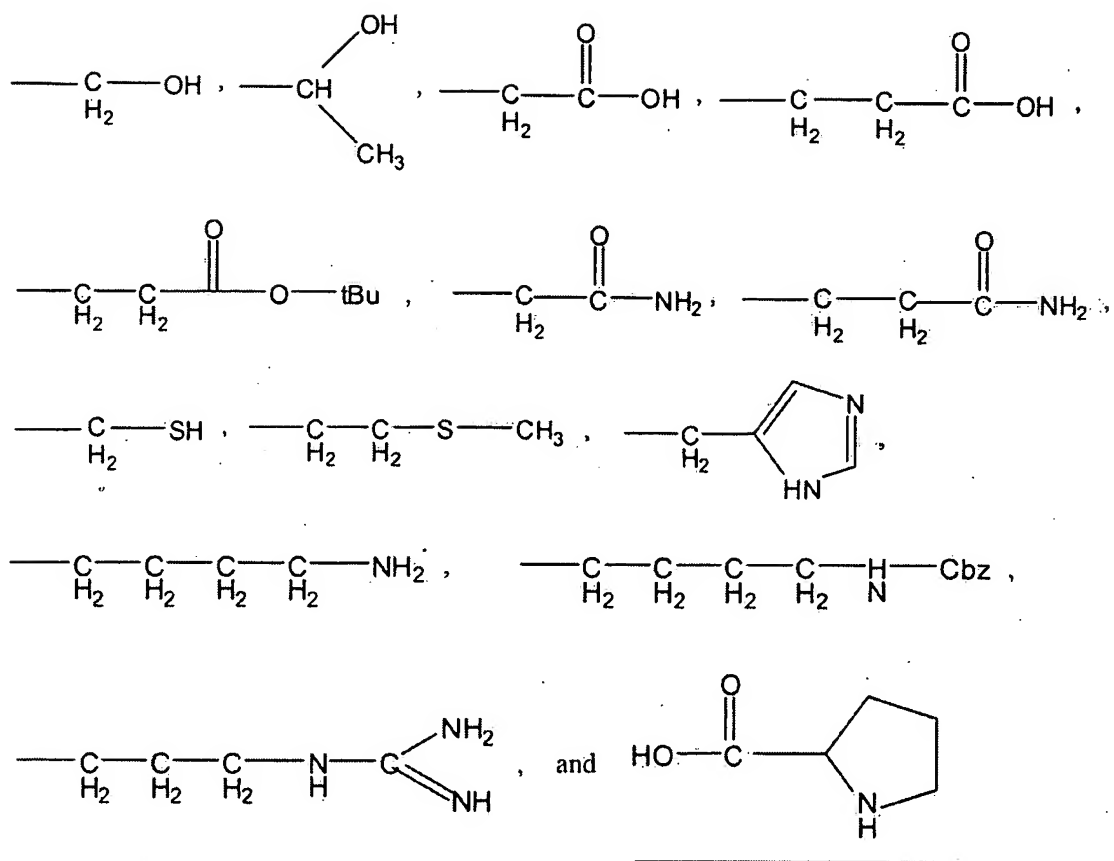
20. (Currently amended) An activity based probe (ABP) having the structure,



wherein

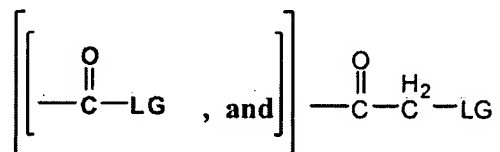
each R_1 and R_2 is independently selected from the group consisting of:



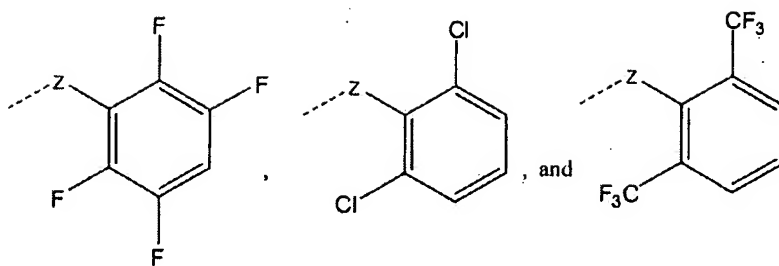


~~R₁ and/or R₂ is —CH₂—CH₂—CH₂—, such that R₁ and/or R₂, along with the —NH— adjacent thereto, forms a pyrrolidine ring;~~

~~RG is selected from the group consisting of~~



wherein LG is selected from the group consisting of



wherein Z is $-O-$ or $-O-C(O)-$;

L is optionally present and is an alkyl or heteroalkyl group of 1-20 backbone atoms selected from the group consisting of: $-N(R)-$, $-O-$, $-S-$ or $-C(R)(R)-$, where each R is independently H or a $-C_{1-6}$ alkyl straight or branched chain;

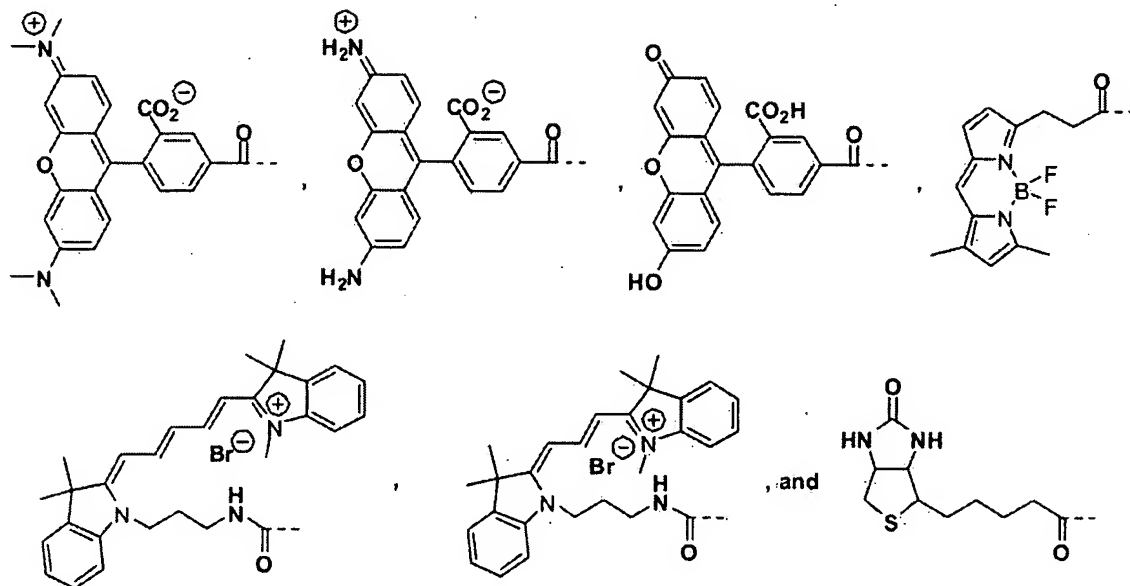
TAG is a detectable label selected from the group consisting of fluorescent moieties, electrochemical labels, biotin, digoxigenin, maltose, oligohistidine, 2,4-dinitrobenzene, phenylarsenate, ~~ssDNA, dsDNA, a polypeptide, a metal chelate~~, a saccharide, dethiobiotin or structurally modified biotin-based reagents which bind to proteins of the avidin/streptavidin family; vicinal diols; maltose which binds to maltose binding protein, as well as any other sugar/sugar binding protein pair; a hapten ~~to which an antibody can be generated~~; a tag which binds to a transition metal such that the transition metal capture reagent may be used in the form of a resin bound chelated transition metal; and glutathione; and

n is an integer from 0 to 4;

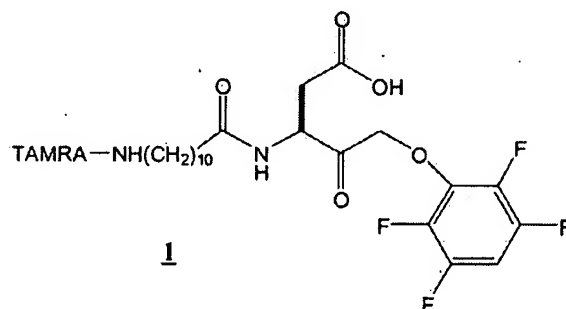
or a pharmaceutically acceptable salt or complex thereof.

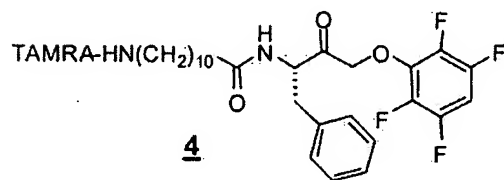
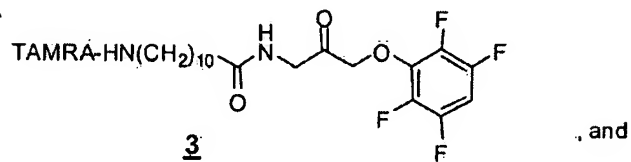
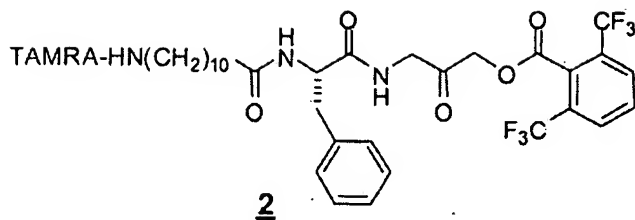
21. (Previously presented) An activity based probe of claim 20 wherein n is 0 or 1.

22. (Previously presented) An activity based probe of claim 20 wherein TAG is selected from the group consisting of:

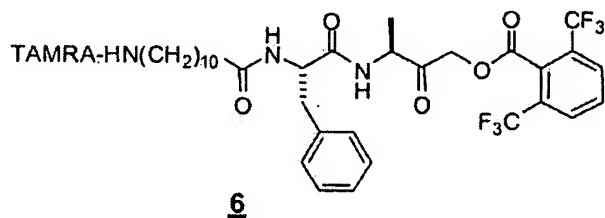
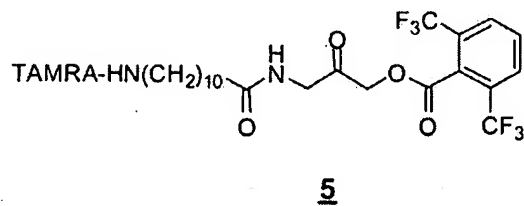


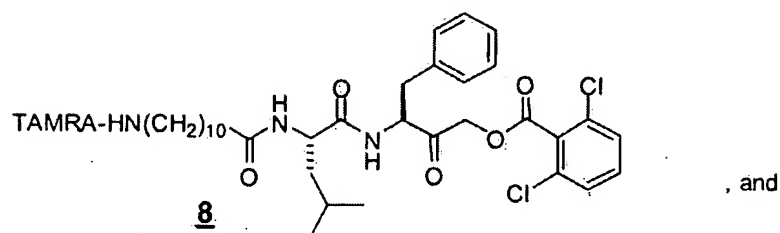
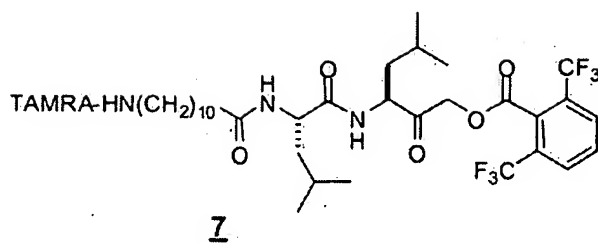
23. (Previously presented) An activity based probe having a structure selected from the group consisting of:



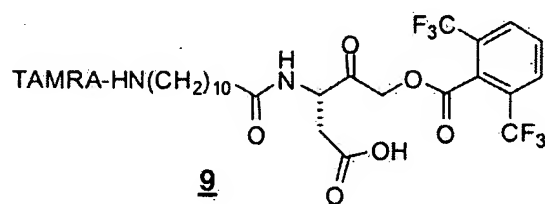


24. (Previously presented) An activity based probe having a structure selected from the group consisting of:





, and



25. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 20.
26. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 21.
27. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 22.
28. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 23.
29. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 24.

30. (Previously presented) An activity based probe having a structure selected from the group consisting of (wherein Z at each occurrence refers to $-\text{C}(\text{O})-\text{O}-\text{CH}_2\text{-phenyl}$):

